

US009543405B2

(12) United States Patent

Ruething et al.

(54) METHOD OF MANUFACTURING A REDUCED FREE-CHARGE CARRIER LIFETIME SEMICONDUCTOR STRUCTURE

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(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 26 days.

(21) Appl. No.: 14/228,330

(22) Filed: Mar. 28, 2014

(65) Prior Publication Data

US 2014/0213022 A1 Jul. 31, 2014

Related U.S. Application Data

- (62) Division of application No. 12/267,793, filed on Nov. 10, 2008, now abandoned.
- (51) Int. Cl.

 H01L 29/73 (2006.01)

 H01L 29/66 (2006.01)

 H01L 29/32 (2006.01)

 H01L 27/06 (2006.01)

 H01L 29/167 (2006.01)

(52) U.S. Cl.

CPC *H01L 29/66348* (2013.01); *H01L 29/32* (2013.01); *H01L 29/7397* (2013.01); *H01L 27/0611* (2013.01); *H01L 29/167* (2013.01)

(10) Patent No.: US 9,543,405 B2

(45) **Date of Patent: Jan. 10, 2017**

(58) Field of Classification Search

None

See application file for complete search history.

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(57) ABSTRACT

A method of manufacturing a reduced free-charge carrier lifetime semiconductor structure includes forming a plurality of transistor gate structures in trenches arranged in a semiconductor substrate, forming a body region between adjacent ones of the transistor gate structures and forming an end-of-range irradiation region between adjacent ones of the transistor gate structures, the end-of-range irradiation region having a plurality of vacancies.

19 Claims, 17 Drawing Sheets

